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# Hamburger — Questions and Answers

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## Hamburger — Questions and Answers

**Q.** Depending on where I shop, I see ground beef labeled differently. Sometimes the words "regular," "lean," and "extra lean" are used, and other times it's "ground chuck" and "ground round" and "ground sirloin." Why?

**A.** "Regular," "lean," and "extra lean" refer to the fat content in ground beef. "Ground chuck," "ground round," and "ground sirloin" refer to the cut of meat being ground. The U.S. Department of Agriculture has standards for these names which are applied only when the meat is ground and packaged in a federally inspected or State-inspected plant. However, supermarkets which grind and package beef themselves sometimes label their ground beef packages according to their own preferences. Some consumers prefer to select a piece of beef and have the supermarket grind it for them.



**Q.** Are there standardized names for ground beef? I thought I had seen such names published before.

**A.** You are probably referring to the voluntary guidelines published by the National Livestock and Meat Board (a national trade association) in cooperation with USDA. The "Uniform Retail Meat Identity Standards" for popular cuts of meat were published in hope that meat suppliers would adopt one uniform name for each cut of meat. Chuck steak would then be called "beef chuck blade steak" in all parts of the country, instead of "California," "Cheyenne," or "his 'n' hers" steak as it is now. These guidelines, however, are only voluntary and not all sellers of meat use the recommended names.

**Q.** Are there Federal grades for ground beef or hamburger?

**A.** No. Ground beef or hamburger may be made from graded (U.S. Prime, Choice, Good, etc.) or ungraded meat. There is no way of telling what quality of meat you may be purchasing because the trimmings used to make ground beef lose their identity during grinding. USDA recommends that you buy ground beef or hamburger by price and by personal taste preference.



**Q.** How much fat is in "regular," "lean," and "extra lean" ground beef?

**A.** The rule-of-thumb many, but not all, stores follow is this: "regular" — no more than 30 percent fat; "lean" — approximately 23 percent, "extra lean" — approximately 15 percent.

**Q.** Does USDA set a limit for fat in ground beef?

**A.** Yes, but only for products ground in federally inspected or State-inspected packing plants. The limit for fat in these products is 30 percent by weight — the equivalent to "regular" ground beef. Most ground beef, though, is ground in local supermarkets to maintain freshness. This grinding is NOT subject to Federal inspection regulations on fat content. Most States and cities, however, do set standards for store-packed ground beef.

**Q.** Many people call ground beef "hamburger," yet I don't often see it labeled that way in the store. Is there a difference?

**A.** USDA distinguishes between ground beef and hamburger only if they are ground and packaged in a federally inspected or State-inspected plant. USDA applies no distinction to beef that is ground in a local supermarket. If ground beef was packaged in a federally inspected plant, however, the package will carry a USDA-inspected mark, and the product will comply with USDA standards. According to

USDA, "hamburger" is ground beef to which seasonings and beef fat may be added while the meat is being ground. No water, extenders, or binders are permitted. "Ground beef" is just what the name implies. No extra fat, water, extenders, or binders are permitted. Seasonings, however, may be added as long as they are identified on the label. Both ground beef and hamburger are limited to 30% fat by weight.

**Q.** From what kind of beef is ground beef made?

**A.** Generally, ground beef is made from the less tender and less popular cuts of beef. Trimmings from higher priced cuts may also be used. These cuts contain varying amounts of fat and lean. Because ground beef is so popular, many supermarkets and butchers cannot get enough meat from a carcass of beef after they have removed the steaks, roasts, and other cuts to fill the demand. Consequently, they may buy less tender meats or less popular wholesale cuts specifically for grinding into ground beef. Some stores may buy imported frozen boneless beef and grind it after adding trimmings from their meat cutting operations. While most steaks and roasts come from younger steers or heifers, much ground beef is prepared from the meat of older animals, which is tougher. Grinding tenderizes it, and the fat reduces its dryness and improves flavor.

**Q.** Why is prepackaged ground beef often red on the outside and dull, greyish brown in the inside?

**A.** The pigment responsible for the red color in meat is oxymyoglobin, a substance found in all warmblooded animals. When exposed to air, this natural pigment combines with oxygen to produce the red color, which is referred to as "bloom." The interior of the meat does not have the red color due to lack of oxygen to cause the "bloom" to appear.

**Q.** What should I look for in buying ground beef and in handling it after purchase?

**A.** First, make sure the package has not been torn. Select a package that feels cold. Most important of all, make ground beef one of your last purchases before leaving the store. Then, get it home quickly, and refrigerate or freeze it immediately. Each of these measures will help preserve the freshness of the meat and reduce the growth of bacteria.

**Q.** How should beef be stored?

**A.** Ground beef, like other fresh meats, should be refrigerated or frozen as soon as possible after purchase. If you plan to use the ground beef within a day or two, it can be stored



in the coldest part of the refrigerator or in a special meatkeeper if your refrigerator has one. Ground beef wrapped in transparent film can be refrigerated without rewrapping. But ground beef wrapped in butcher paper should be unwrapped and repackaged in transparent film or wax paper. If ground beef is to be stored in a freezer for 2 weeks or less, it may be kept in transparent film without moisture loss. For longer storage, it should be wrapped tightly in moisture-resistant material like aluminum foil, freezer paper, or plastic bags. Ground beef kept frozen at  $0^{\circ}\text{F}$  ( $-18^{\circ}\text{C}$ ) can be stored for up to 3 months with little loss of quality. Mark your packages with the date they were placed in the freezer so you can keep track of storage times.

**Q.** What is the best way to thaw ground beef?

**A.** Ground beef should be thawed in the refrigerator. Keeping the meat cold while it is thawing is essential to prevent growth of bacteria. If you must thaw ground beef rapidly, put the meat in a watertight wrapper in cold water or defrost it in a microwave oven; then cook it as soon as it is thawed.

**Q.** Are high bacterial counts dangerous in ground beef? What can be done about them?

**A.** High bacterial counts are not necessarily a hazard to health as long as the meat is thoroughly cooked before eating and proper handling practices are followed. Ground beef, made as it often is from trimmings, has been handled more than other cuts of beef. Grinding exposes and distributes more of the meat surface to bacteria normally occurring in the meat, in the air, on the butcher's hands, and on the equipment. These bacteria are not harmful, but they will cause loss of quality and spoilage if the meat is mishandled. To keep bacterial levels low, keep ground beef cold [ $40^{\circ}\text{F}$  ( $4^{\circ}\text{C}$ ) or lower] during storage and cook it thoroughly. Also, wash your hands thoroughly with soap and hot water immediately before and after handling ground beef—to make sure you don't spread bacteria. To avoid cross-contamination, don't reuse any packaging

materials or utensils which have come in contact with the raw meat, unless they, too, are washed thoroughly with soap and hot water.

**Q.** Why does ground beef release a lot of "juice" while cooking?

**A.** In making ground beef, some retail stores grind the meat while it is still frozen. Ice crystals, which are incorporated into the meat, melt when the meat is cooked. The same thing can occur from home freezing. If large packages of ground beef are frozen, freezing will be slow, causing large ice crystals to form in the cell walls. The ice crystals break down the cell walls, permitting release of the cellular fluid or meat juice during cooking.

**Q.** What causes ground beef patties to shrink while cooking?

**A.** All meat will shrink in size and weight during cooking. The amount of shrinkage will depend on its fat and moisture content, the temperature at which the meat is cooked, and how long it is cooked. Basically, the higher the cooking temperature, the greater the shrinkage. Cooking ground beef at moderate temperatures [325-350°F (163°C-177°C)] will reduce shrinkage and help retain juices and flavor. Overcooking draws out more fat and juices from ground beef and results in more shrinkage and a dry, unpalatable product.

**Q.** Is there any danger in eating raw ground beef?

**A.** USDA recommends against eating or tasting raw ground beef since harmful food-poisoning bacteria could be present.

**Q.** Is there any danger in eating rare ground beef?

**A.** USDA recommends thorough cooking for safety's sake. If you do enjoy your hamburgers rare, however, make sure the meat is at least brownish-pink in color. That would be the equivalent to cooking the meat to an internal temperature of 145°F (63°C). Cooking frozen hamburger is not recommended since the center of the patty may remain uncooked. And be sure to handle the meat carefully to minimize the risk from harmful bacteria.



